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**EXCESS OPACITY REPORT - FOURTH QUARTER, CALENDAR YEAR  
1994 - FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP),  
PERMIT NO. 1431110128, BOO1/BOO3**

01/16/95

**C:EC:94-0005  
FERMCO      HAMILTON COUNTY  
13  
REPORT**



Restoration Management Corporation

P.O. Box 398704 Cincinnati, Ohio 45239-8704 (513) 738-6200

January 16, 1995

U. S. Department of Energy  
Fernald Environmental Management Project  
Letter No. C:EC:94-0005

Ms. Susan L. Kestler  
Air Quality Management  
Hamilton County Department  
of Environmental Services  
1632 Central Parkway  
Cincinnati, Ohio 45210

Dear Ms. Kestler:

**EXCESS OPACITY REPORT - FOURTH QUARTER, CALENDAR YEAR 1994 - FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP), PERMIT NO. 1431110128, B001/B003**

Enclosed is the Excess Opacity Report for the Fourth Quarter of Calendar Year 1994, for Boilers Nos. 1 and 3, which are located at the FEMP Steam Plant. This report is submitted in accordance with the special conditions of the Ohio Environmental Protection Agency Permits to Operate Nos. 1431110128, B001 and B003, issued on October 2, 1992. Both boilers operated during the reporting period.

During the reporting period, the opacity monitoring and recording system operated continuously. A scheduled quarterly calibration was performed on both boiler's Opacity Monitors. The opacity monitor for No. 3 Boiler was left on four minute averaging instead of the six allowed. This was corrected when discovered. Boiler No. 1 operated 837 hours while Boiler No. 3 operated 1314 hours.

If you have any questions concerning these reports, please contact Ervin Fisher of my staff at (513) 738-6053.

Sincerely,



Terence D. Hagen, Director  
Environmental Compliance

TDH:EF:mhv  
Enclosure

c: With Enclosure

L. Pennington, FERMCO/MS60  
E. P. Skintik, DOE-FN/MS45  
AR Coordinator  
File Record Storage Copy 108.6  
RTS Files

Without Enclosure

S. M. Beckman, FERMCO/MS65-2  
S. L. Blankenship, FERMCO/MS71-3  
D. Paine, FERMCO/MS35-1  
P. B. Spotts, FERMCO/MS65-2

**FEMP  
Boiler Plant  
EXCESS OPACITY REPORT**

Month/Year: October, 1

Monitored Source: Boiler No. 1

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation

Location: Fernald, Ohio

Operating Hours: 744

Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
10/6	8:24 A.M.	8:30 A.M.	21%	Load change	Readjusted boiler	500°
10/7	8:48 P.M.	8:54 P.M.	28%	Blowing soot	Done blowing soot	505°
10/19	2:24 P.M.	2:30 P.M.	22%	Shear loop broke	Replacing loop	490°
10/19	2:30 P.M.	2:36 P.M.	23%	Shear loop broke	Replaced loop	490°
10/21	9:06 P.M.	9:12 P.M.	43%	Blowing soot	Done blowing soot	500°
10/21/22	10:36 P.M.	2:00 A.M.	AVG-22%	E.S.P. kicked out	Reset E.S.P.	490°
10/26	7:00 A.M.	7:06 A.M.	22%	Load change	Readjusted boiler	500°
10/28	8:36 P.M.	8:42 P.M.	28%	Blowing soot	Done blowing soot	480°

\*NOTIFIED DOES-AQM OF ALL EQUIPMENT MALFUNCTIONS DURING THE MONTH OF OCTOBER

**FEMP**  
**Boiler Plant**  
**EXCESS OPACITY REPORT**

FEMP  
Boiler Plant  
EXCESS OPACITY REPORT

Month/Year: December, 19

Monitored Source: Boiler No. 1

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation

Location: Fernald, Ohio

Operating Hours: 0

Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
12/10	12:36 P.M.	12:42 P.M.	29%	Banking boiler	Adjusting boiler	<250°
12/10	12:42 P.M.	12:48 P.M.	62%	Banking boiler	Done banking	<250°
12/11	4:24 P.M.	4:30 P.M.	28%	Banking boiler	Adjusting boiler	270°
12/11	5:48 P.M.	5:54 P.M.	22%	Banking boiler	Adjusting boiler	290°
12/11	8:00 P.M.	8:06 P.M.	26%	Banking boiler	Done banking	380°
12/12	5:12 A.M.	5:18 A.M.	38%	Banking boiler	Done banking	340°
12/13	5:36 P.M.	5:42 P.M.	25%	Banking boiler	Done banking	270°
12/13	9:36 P.M.	9:42 P.M.	27%	Banking boiler	Done banking	<250°
12/19	4:36 A.M.	4:42 A.M.	24%	Banking boiler	Done banking	280°
12/20	9:24 A.M.	9:30 A.M.	25%	Banking boiler	Done banking	260°
12/21	5:30 A.M.	5:36 A.M.	22%	Banking boiler	Done banking	280°
12/21	6:12 P.M.	6:18 P.M.	34%	Banking boiler	Done banking	<250°

FEMP  
Boiler Plant  
EXCESS OPACITY REPORT

Month/Year: December, 1994

Monitored Source: Boiler No. 1

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation

Location: Fernald, Ohio

Operating Hours:

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Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
12/21	9:54 P.M.	10:00 P.M.	46%	Banking boiler	Adjusting boiler	<250°
12/21	10:00 P.M.	10:06 P.M.	31%	Banking boiler	Done banking	<250°
12/22	12:00 A.M.	12:06 A.M.	24%	Banking boiler	Done banking	250
12/22	5:06 A.M.	5:12 A.M.	24%	Banking boiler	Done banking	<250°
12/22	9:36 A.M.	11:54 A.M.	AVG. 26%	Shut off E.S.P.	Installed new auto voltage controller in #1 field, restarted E.S.P.	<250°
12/22	7:30 P.M.	7:36 P.M.	32%	Banking boiler	Done banking	<250°
12/23	5:48 A.M.	5:54 A.M.	29%	Banking boiler	Done banking	<250°
12/23	8:48 P.M.	8:54 P.M.	22%	Banking boiler	Done banking	<250°
12/25	1:36 A.M.	1:42 A.M.	37%	Banking boiler	Adjusting boiler	<250°
12/25	2:00 A.M.	2:06 A.M.	34%	Banking boiler	Done banking	<250°
12/25	10:12 P.M.	10:18 P.M.	22%	Banking boiler	Done banking	<250°
12/26	4:00 A.M.	4:06 A.M.	21%	Banking boiler	Adjusting boiler	<250°
12/26	4:06 A.M.	4:12 A.M.	38%	Banking boiler	Done banking	<250°



**FEMP**  
**Boiler Plant**  
**EXCESS OPACITY REPORT**

**Opacity Limit: 20%**



**FEMP  
Boiler Plant  
EXCESS OPACITY REPORT**

Month/Year: November, 19

Monitored Source: Boiler No. 3

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation

Location: Fernald, Ohio

Operating Hours: 599

Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
11/2	3:00 P.M.	5:48 P.M.	54%Avg.	Put fire in Boiler	Started E.S.P.	<250°
11/3	5:08 P.M.	5:12 P.M.	29%	Warming Boiler	Done warming boiler	<250°
11/5	3:00 P.M.	3:04 P.M.	24%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	5:00 P.M.	5:04 P.M.	26%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	5:24 P.M.	5:28 P.M.	39%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	5:52 P.M.	5:56 P.M.	42%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	5:56 P.M.	6:00 P.M.	38%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	6:52 P.M.	6:56 P.M.	90%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	6:56 P.M.	7:00 P.M.	46%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	7:32 P.M.	7:36 P.M.	86%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	7:36 P.M.	7:40 P.M.	75%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	7:40 P.M.	7:44 P.M.	46%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	7:44 P.M.	7:48 P.M.	23%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	7:48 P.M.	7:52 P.M.	27%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	7:52 P.M.	7:56 P.M.	36%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	7:56 P.M.	8:00 P.M.	24%	Warming Boiler	Adjusting Fuel Bed	<250°

FEMP  
Boiler Plant  
EXCESS OPACITY REPORT

Month/Year: November, 1994

Monitored Source: Boiler No. 3

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation PAGE 2

Location: Fernald, Ohio

Operating Hours:

Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
11/5	8:00 P.M.	8:04 P.M.	28%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	8:04 P.M.	8:08 P.M.	34%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	8:08 P.M.	8:12 P.M.	30%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	8:28 P.M.	8:32 P.M.	23%	Warming Boiler	Adjusting Fuel Bed	<250°
11/5	8:32 P.M.	8:36 P.M.	21%	Warming Boiler	Done Warming	<250°
11/5	11:16 P.M.	11:20 P.M.	36%	Starting to put boiler on line	Adjusting Boiler	300°
11/5	11:48 P.M.	11:52 P.M.	36%	Starting to put boiler on line	Adjusting Boiler	300°
11/5	11:52 P.M.	11:56 P.M.	44%	Starting to put boiler on line	Adjusting Boiler	300°
11/6	12:24 A.M.	12:28 A.M.	48%	Putting boiler in service	Adjusting Boiler	370°
11/6	12:28 A.M.	12:32 A.M.	66%	Putting boiler in service	Adjustments complete boiler on line	370°
11/6	9:32 P.M.	9:36 P.M.	21%	Coal change	Readjusted boiler	500°
11/6	11:36 P.M.	11:40 P.M.	21%	Coal stoppage	Unstop coal feeder	500°
11/7	2:32 P.M.	2:36 P.M.	24%	Load change	Readjusted boiler	520°
11/7	6:08 P.M.	6:12 P.M.	27%	Pulling ashes	Done pulling ashes	500°

FEMP  
Boiler Plant  
EXCESS OPACITY REPORT

Month/Year: November, 19

Monitored Source: Boiler No. 3

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation

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Location: Fernald, Ohio

Operating Hours:

Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
11/9	10:48 A.M.	10:52 A.M.	40%	Load change	Readjusted boiler	<250°
11/11	8:56 P.M.	9:00 P.M.	41%	Blowing Soot	Readjusting boiler	505°
11/11	9:08 P.M.	9:12 P.M.	41%	Blowing Soot	Done blowing soot	505°
11/21	7:40 P.M.	7:44 P.M.	25%	Shear loop broke	Replaced loop	500°
11/22	7:12 A.M.	7:16 A.M.	22%	Excessive steam load	Adjusting boiler	505°
11/22	7:16 A.M.	7:20 A.M.	36%	Excessive steam load	Adjusting boiler	505°
11/22	7:20 A.M.	7:24 A.M.	40%	Excessive steam load	Adjusting boiler	505°
11/22	7:28 A.M.	7:32 A.M.	22%	Excessive steam load	Adjusting boiler	505°
11/22	7:32 A.M.	7:36 A.M.	26%	Excessive steam load	Adjusting boiler	505°
11/22	8:00 A.M.	8:06 A.M.	21%	Excessive steam load	Adjusting boiler	505°
11/22	8:48 A.M.	8:52 A.M.	23%	Excessive steam load	Adjustment complete	505°

THE ABOVE EXCEEDANCES ARE IN 4-MINUTE INCREMENTS INSTEAD OF THE REQUIRED 6-MINUTES - DURING T QUARTERLY CALIBRATION, THE UNIT WAS SET WRONG.

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**-FEMP**

**Month/Year: November, 1994**

**Opacity Limit: 20%**

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**Company Name: Fernald Environmental Restoration Management Corporation**

**Location:** Fernald, Ohio

**Operating Hours:**

[illegible]

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**FEMP  
Boiler Plant  
EXCESS OPACITY REPORT**

Month/Year: December, 19

Monitored Source: Boiler No. 3

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation

Location: Fernald, Ohio

Operating Hours: 715

Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
12/2	8:30 P.M.	8:36 P.M.	40%	Blowing soot	Done blowing soot	530°
12/3	9:42 P.M.	9:48 P.M.	21%	Boiler off line warming boiler	Done warming	<250°
12/8	6:12 A.M.	6:18 A.M.	28%	Coal change	Readjusting boiler	530°
12/9	8:24 P.M.	8:30 P.M.	33%	Blowing soot	Done blowing soot	530°
12/10	7:36 A.M.	7:42 A.M.	21%	Pulling ashes	Done pulling ashes	535°
12/16	7:24 P.M.	7:30 P.M.	42%	Blowing soot	Done blowing soot	540°
12/17	8:30 P.M.	8:36 P.M.	23%	Broken shear loop	Replaced shear loop	520°
12/19	1:30 A.M.	1:36 A.M.	21%	Load swing	Readjusted boiler	530°
12/19	9:48 P.M.	9:54 P.M.	34%	Coal change	Readjusting boiler	535°
12/19	9:54 P.M.	10:00 P.M.	26%	Coal change	Adjustment complete	535°

FEMP  
Boiler Plant  
EXCESS OPACITY REPORT

Month/Year: December, 1994

Monitored Source: Boiler No. 3

Opacity Limit: 20%

Company Name: Fernald Environmental Restoration Management Corporation

Location: Fernald, Ohio

Operating Hours:

PAGE 2

Day	Start	End	Opacity (%)	Cause	Corrective Action	E.P. Temp
12/20	2:24 A.M.	2:30 A.M.	29%	E.S.P. kicked out	Working on E.S.P.	530°
12/20	2:30 A.M.	2:36 A.M.	55%	E.S.P. kicked out	Working on E.S.P.	530°
12/20	2:36 A.M.	2:42 A.M.	26%	E.S.P. kicked out	Reset E.S.P.	530°
12/20	5:24 A.M.	5:30 A.M.	23%	Pulling ashes	Done pulling ashes	530°
12/21	6:00 A.M.	6:06 A.M.	21%	Pulling ashes	Done pulling ashes	530°
12/28	7:18 P.M.	7:24 P.M.	24%	Load change	Readjusted boiler	540°
12/29	10:18 P.M.	10:24 P.M.	40%	E.S.P. kicked out	Working on E.S.P.	540°
12/29	10:24 P.M.	10:30 P.M.	46%	E.S.P. kicked out	Working on E.S.P.	540°
12/29	10:30 P.M.	10:36 P.M.	66%	E.S.P. kicked out	Working on E.S.P.	540°
12/29	10:36 P.M.	10:42 P.M.	27%	E.S.P. kicked out	Reset E.S.P.	540°

\*NOTIFIED DOES-AQM ON 12/20/94 AND 12/29/94 OF THE EQUIPMENT MALFUNCTIONS EXPERIENCED.